# The Effect of Spirituality on Health and Healing: A Critical Review for Athletic Trainers

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**Objective**: To provide a comprehensive overview of the published literature regarding the effect of spirituality on health and healing.

**Data Sources**: I searched MEDLINE from 1976 to 1999 using the terms "spirituality," "religion," "faith," "healing," and "health."

**Data Synthesis:** Strong scientific evidence suggests that individuals who regularly participate in spiritual worship services or related activities and who feel strongly that spirituality or the presence of a higher being or power are sources of strength and comfort to them are healthier and possess greater healing capabilities. Numerous research investigations have reported positive correlations between spirituality and decreased rates of stroke, cancer, cardiovascular disease, hypertension, drug abuse, suicide, and general mortality. It has been

suggested that faith is beneficial for health and healing because it helps people avoid unhealthy behaviors such as smoking and excessive drinking. However, studies designed to statistically control for such factors also report positive associations between spirituality and health in individuals with unhealthy behaviors.

Conclusions/Recommendations: The impact of spirituality on health and healing is a topic that has been virtually ignored in the disciplines of athletic training and sports medicine. Because of their lack of exposure to this topic, most athletic trainers are unaware of the many positive associations that exist between spirituality and health and healing. The available literature base regarding this topic is quite large; its findings need to be explored and integrated into our profession.

Key Words: faith, health status, commitment

linical and scientific communities are continually trying to improve the quality of care offered to individuals seeking medical attention. These efforts may include improving existing and developing new pharmacologic interventions, medical equipment, and therapeutic and surgical interventions. However, with all of the sophisticated technologic advances in medicine today, a relatively unknown factor has been shown to have a profound impact on health and healing: the relative strength of an individual's faith or spirituality.

Spirituality is defined as having to do with the spirit or the soul, as distinguished from the body, and is often thought of as the better or higher part of the mind. Religion is defined as any specific system of belief, worship, conduct, etc, often involving a code of ethics and a philosophy. The terms "religiousness" and "spirituality" are often used interchangeably, and there is no solid consensus about the boundaries between them. I will use these terms interchangeably throughout this review. Ultimately, the meanings of religiousness and spirituality for a particular individual are idiosyncratic, reflecting numerous variables including cultural, theologic, developmental, and even biological factors.

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### **GENERAL HEALTH**

A large number of investigators have evaluated the link between spiritual commitment and general health. Levin and Schiller<sup>3</sup> reviewed nearly 250 research studies and examined the relationship between spiritual commitment and stroke, cancer, cardiovascular disease, colitis, hypertension, enteritis, general health status, and mortality. They reported consistently positive correlations between spiritual commitment and these health variables.

The relationship between blood pressure and spiritual commitment has been studied extensively. In 1 study, 4 men who believed that spiritual commitment was important to them and who regularly attended spiritual services had significantly lower diastolic blood pressures than men who were not spiritually committed. This study also analyzed smoking behavior among participants and found that smokers who regularly attended spiritual services and who reported strong personal spiritual convictions were 7 times less likely to have abnormal diastolic blood pressures. Some<sup>5</sup> have suggested that religious proscriptions against alcohol, drugs, and tobacco are largely responsible for lower disease rates in spiritually committed individuals. However, strong spiritual commitment seemed to have a protective health effect even in the presence of unhealthy behaviors, such as smoking. A review<sup>6</sup> of nearly 20 published studies examining the relationship of spiritual commitment to blood pressure concluded that strong spiritual commitment was consistently associated with lower blood pressures.

Researchers have also shown that general health status is positively affected by strong spiritual commitment. Ferraro and Albrecht-Jensen<sup>7</sup> reported that frequency of prayer and spiritual service attendance were significantly related to health status independent of age. This study also provided evidence that the impact of spiritual commitment on health paralleled the effect of an individual's level of education, which has long been shown to be a critical factor in health. The authors controlled statistically for social class (ie, affluence) and social club membership (ie, Rotary, Lions Club) and reported that spiritual commitment remained a strong predictor of general health status. Levin and Schiller<sup>3</sup> also reported superior health status in individuals who attended spiritual services on a regular (weekly) basis.

A variety of investigators have reported that strong spiritual commitment is positively associated with lower rates of arteriosclerotic disease in men and women,<sup>8</sup> better health and longer life span,<sup>9</sup> decreased rates of suicide,<sup>8</sup> fewer suicidal thoughts,<sup>10</sup> decreased rates of alcohol and drug abuse,<sup>11,12</sup> and greater levels of happiness and life satisfaction.<sup>13</sup>

A strong body of evidence appears to reveal a positive relationship between spiritual commitment and health status. Keep in mind that these studies do not establish a direct cause-and-effect relationship; however, they provide evidence for significant associations between strength of spiritual commitment and good health. These associations appear to be so consistent that infrequent spiritual service attendance has been suggested as a definite health risk factor.<sup>14</sup>

## **HEALING AND RECOVERY**

In addition to general health status, numerous scientific studies have examined the effect of faith and spiritual commitment on healing and recovery. Harris et al<sup>15</sup> explored the role of spiritual commitment in heart-transplant recipients' longterm health and well being. Heart-transplant recipients who regularly attended spiritual services and who reported having strong spiritual beliefs complied better with their rehabilitation protocols, reported higher emotional well-being indexes, and had superior physical functioning capabilities. The authors stated that it was wise for health care professionals to encourage spiritual commitment and spiritual participation to their patients. An additional study 16 conducted on cardiac surgery patients explored the relationship between spiritual commitment and surgery survival rates. Patients described themselves as being 1) deeply spiritual, 2) involved in organized groups, such as a senior center, or 3) uninvolved. At the 6-month follow-up point, 14% of the patients who considered themselves uninvolved had died, 4% of the patients who stated that they were involved in organized groups had died, and of the patients who considered themselves deeply spiritual, none had died. The authors asserted that the strength of a person's faith was the strongest predictor of who survived cardiac surgery. Those patients who reported deriving at least some strength from their spiritual commitment were 3 times more likely to survive surgery. Women who suffered hip fractures were studied for depression and functional capacity. 17 Patients who reported that a higher being or power was a source of strength to them and who frequently attended spiritual services fared better on a functional outcome measure (distance walked at discharge) and were less depressed during their medical care.

Research studies examining more subjective measures have been conducted on patient populations as well. Advanced

breast cancer patients who reported having a sense of selftranscendence had less distress dealing with their illness and reported greater emotional well-being. 18 Self-transcendence is described as a profound and potentially transformative experience that can have a vast array of manifestations.2 Ovarian cancer patients reported that they depend greatly on their spirituality to help them cope with their disease 19; the authors advised that it may be wise to add a chaplain to the treatment team of cancer patients, if the patient so wishes, since spirituality is such a strong coping mechanism for individuals fighting this disease. In a patient population of hospitalized, medically ill men, religious commitment and religious coping helped patients recover from depression more quickly.9 Finally, patients with increased commitment to their spirituality reported their health as better than the health of other patients.20

One of the most commonly referenced studies was done by Byrd,<sup>21</sup> who examined the therapeutic effects of intercessory prayer in a coronary care population. Byrd randomly assigned 393 patients to receive either daily prayer or no prayer. The prayers were offered by a group of nondenominational, committed Christians. The Christians offered prayers for a rapid recovery, for prevention of complications and death, and for any other areas they believed would be beneficial to the patients. The study used a double-blind, randomized design. Physicians, nurses, and patients did not know who was or was not being prayed for; only the individuals offering the prayers knew the names of the recipients of the prayers. Pretesting revealed no significant differences between the 2 groups in cardiac or noncardiac diagnoses. However, at discharge, the patients who received the intercessory prayer differed significantly on 6 variables: they required significantly less intubation and ventilation assistance, fewer antibiotics, and fewer diuretics and had significantly fewer cardiopulmonary arrests, fewer episodes of congestive heart failure, and fewer cases of pneumonia. Less research has been conducted on prayer and its effect on health, yet approximately 90% of women and 85% of men pray, and approximately 80% pray on a weekly basis.<sup>22</sup>

Research on healing and recovery closely parallels the research reported for general health. Once again, evidence shows that the stronger one's spiritual commitment is, the more likely fast and effective healing and recovery will occur.

### **ASSESSMENT OF FAITH**

Approaching the topic of a patient's faith can be an extremely delicate situation for an athletic trainer or any health care provider. One of the reasons this task may be extremely challenging is that health care providers usually do not receive adequate training in their various educational programs with regard to assessing their patients' spiritual beliefs. In fact, only about 5% of physicians receive regular training on spiritual topics during their educational tenures.<sup>23</sup> I found no studies that examined the addressing or teaching of spiritual issues in athletic training or sports medicine educational programs.

Patients may be uncomfortable or even offended if asked about their spiritual beliefs and the relative strength of such beliefs. In the past, a person's faith was a topic that was rarely discussed or brought up in clinical or sports medicine settings. Reiser and Rosen<sup>24</sup> stated that family physicians are adept at assessing and treating disease but are usually ignorant of the spiritual component of illness. These authors strongly criti-

cized contemporary medicine, saying the spiritual concerns of patients have been abysmally neglected.

One way to approach the topic of spirituality with patients is by asking them a simple, nonthreatening question regarding their spiritual beliefs. This simple introductory question should give the care provider insight into whether the patient would be interested in pursuing the subject of spirituality and spiritual commitment.<sup>25</sup> Waldfogel<sup>2</sup> offered a number of sample questions and statements that could be used to assess a patient's interest in the topic of spirituality:

- Do you belong to a religious or spiritual community?
- How important is your religious and spiritual identification?
- What aspects of your religion or spirituality would you like me to be aware of?
- What does your belief in God mean to you? Has it changed during your illness?
- Tell me of your belief in God or a higher power.
- Tell me of your religious and spiritual practices, such as prayer or meditation.

These questions could certainly be modified to fit the care giver's and the patient's comfort levels.

Research to assess spiritual health and well being is in its infancy.<sup>26</sup> However, a number of tools are available that attempt to quantify or assess a person's level of spiritual commitment. One of the simplest is Kasl's<sup>9</sup> 3-item religious index:

- 1. How often do you attend regular religious services during the year?
- 2. Aside from your frequency of attendance, how religious do you consider yourself to be?
- 3. How much is religion (and/or God) a source of strength and comfort to you?

The answers to these questions range from never to more than once a week, very religious to against religion, and not very much to a great deal, respectively. Kuhn's<sup>27</sup> Spiritual Inventory is a 25-item questionnaire also used to assess patients' spiritual health. Among the items evaluated by Kuhn's Inventory are hope, faith, love, prayer, worship, ability to laugh and celebrate, and the attachment of meaning and purpose to life. A 12-item scale developed by Strayhorn et al<sup>28</sup> considers a number of devotional factors in its assessment of spiritual commitment, including frequency of prayer, reading the Bible, and service to one's spiritual community. Finally, one of the more popular assessment tools contains 20 items that examine both existential and religious issues to give more of an encompassing measure of spiritual health.<sup>29</sup>

The question of whether patients desire their spiritual beliefs to be addressed by their care providers has been studied. Surprisingly, 75% of patients surveyed wished to have their spiritual commitment addressed by their health care provider,<sup>30</sup> and nearly 50% of the respondents wanted to pray with their physicians. Patients in this study also reported that their faith was rarely discussed during medical visits. The fact that so many patients want their spiritual commitment addressed is less surprising when we consider that 95% of Americans express belief in God.<sup>31</sup> Additionally, Bergin and Jenson<sup>32</sup> studied marriage and family therapists, social workers, psychiatrists, and psychologists and reported that more than 75% of these professionals stated that they try hard to live their lives according to their spiritual beliefs; nearly 50% stated that their whole approach to life is based on their spirituality. Whether the findings of Bergin and Jenson's<sup>32</sup> study can be inferred or generalized to the general population, however, is unclear.

Approaching the topic of spiritual beliefs and commitment with patients or clients appears to be potentially less taboo and threatening than medical care providers may have traditionally thought.

## INTEGRATION INTO CLINICAL PRACTICE

As athletic trainers become more aware of the positive associations among health, healing, and spirituality, they can begin to make a conscious effort to incorporate this dimension into their health care paradigm if they so choose. The athletic trainer's comfort level, as well as the comfort level of the patient, must be given serious consideration before spiritual issues are explored. As I outlined previously, a simple, nonthreatening question can inform the care giver if the patient is receptive to a conversation about spirituality. Because this topic is relatively new to our profession, no standards or guidelines exist to assist athletic trainers in the practical application in various clinical settings. If patients have a desire to explore spiritual issues, athletic trainers may engage in a spiritual conversation with the patient, recommend readings from the religious or spiritual literature, encourage the patient to attend spiritual worship services or activities, and possibly even engage in prayer sessions with the patient. It is strongly recommended that athletic trainers take a nondenominational, nonthreatening approach when integrating religious and spiritual components into their practice to avoid pushing personal beliefs and convictions onto their patients. As career opportunities for athletic trainers continue to expand (eg, sports medicine clinics; high school, collegiate, and professional sporting teams; corporate health care centers; and health and fitness settings), the opportunity to share this information with interested patients and clients will certainly be available.

# **CONCLUSIONS**

Spirituality and health is a topic that has seemingly received little attention in our profession. Study after study has suggested that a relationship does exist between the strength of one's spirituality and one's overall health. In a comprehensive review of more than 300 published studies in the medical field, Levin<sup>33</sup> concluded that "although most of these studies are correlational, use inadequate measures of religious commitment such as religious denomination or other single-item measures, and seldom assess the intensity of religious commitment, they generally have suggested a beneficial, or salutary, effect for religious or spiritual involvement on physical and mental health status." The question of how spirituality exerts this protective effect over health has not yet been answered. Waldfogel<sup>2</sup> stated, "many benefits of spirituality that are felt to occur secondary to spiritual practices per se directly affect physiologic processes via mechanisms that are incompletely understood."

Health care providers need not embrace or share their patients' spiritual convictions,<sup>34</sup> but a patient's spiritual beliefs must always be highly respected and never addressed in a cynical or demeaning manner. It is also inappropriate for health care providers to impose or push personal spiritual convictions or agendas onto their patients.

Much of the research on this topic has been performed with elderly individuals and severely diseased (ie, cardiac surgery) patients and has been conducted in conjunction with physicians. Future research must address this topic in younger and more athletic populations and could potentially be performed in conjunction with athletic trainers in clinical as well as sports medicine settings.

The goal of athletic trainers should be to provide the highest quality, comprehensive care possible to the athletes and patients who are under our supervision. Learning more about the effects of spirituality on health and healing and possibly incorporating these principles into our prevention and treatment philosophies may be one way to enhance the care we give to our clients and to continue to advance our profession.

### **REFERENCES**

- Webster's New Twentieth Century Dictionary. Ann Arbor, MI: Collins World Publishing; 1978.
- 2. Waldfogel S. Spirituality in medicine. Prim Care. 1997;24:963-976.
- Levin JS, Schiller FL. Is there a religious factor in health? J Rel Health. 1987:26:9-35.
- Larson DB, Koening HG, Kaplan BH, Greenberg RS, Logue E, Tyroler HA. The impact of religion on men's blood pressures. J Rel Health. 1989:28:265-278.
- Waldfogel S, Wolpe P. Using awareness of religious factors to enhance interventions in consultation-liaison psychiatry. Hosp Community Psychiatry. 1993;44:473–477.
- Levin JS, Vanderpool HY. Is religion therapeutically significant for hypertension? Soc Sci Med. 1989;29:69-78.
- Ferraro KF, Albrecht-Jensen CM. Does religion influence adult health? J Sci Study Rel. 1991;30:193–202.
- Comstock GW, Partridge KB. Church attendance and health. J Chronic Dis. 1972;25:665–672.
- Zuckerman DM, Kasl SV, Ostfield AM. Psychosocial predictors of mortality among the elderly poor: the role of religion, well-being, and social contacts. Am J Epidemiol. 1984;119:410-423.
- 10. Gartner J, Larson DB, Allen G. Religious commitment and mental health: a review of the empirical literature. *J Psychol Theol.* 1991;19:6–25.
- Gorsuch RL, Butler MC. Initial drug abuse: a review of predisposing social psychological factors. Psychol Bull. 1976;83:120-137.
- Larson DB, Wilson WP. Religious life of alcoholics. South Med J. 1980;73:723-727.
- 13. Poloma MM, Pendleton BF. The effects of prayer and prayer experiences on measures of general well-being. *J Psychol Theol.* 1991;19:71-83.
- Levin JS, Vanderpool HY. Is frequent religious attendance really conducive to better health? Toward an epidemiology of religion. Soc Sci Med. 1987;24:589-600.
- 15. Harris RC, Dew MA, Lee A, Amaya M, Reetz D, Coleman G. The role of

- religion in heart-transplant recipients' long-term health and well-being. *J Rel Health.* 1995;34:17–32.
- Oxman TE, Freeman DH Jr, Manheimer ED. Lack of social participation or religious strength and comfort as risk factors for death after cardiac surgery in the elderly. *Psychosom Med.* 1995;57:5-15.
- Pressman P, Lyons JS, Larson DB, Strain JJ. Religious belief, depression, and ambulation status in elderly women with broken hips. Am J Psychiatry. 1990;147:758-760.
- Coward DD. Self-transcendence and emotional well-being in women with advanced breast cancer. Oncol Nurs Forum. 1991;18:857–863.
- Roberts JA, Brown T, Elkins T, Larson DB. Factors influencing views of patients with gynecologic cancer about end-of-life decisions. Am J Obstet Gynecol. 1997;176:166-172.
- Hudson T. Measuring the results of faith. Hosp Health Netw. 1996;70: 23-24.
- 21. Byrd R. Positive therapeutic effects of intercessory prayer in a coronary care unit population. *South Med J.* 1988;81:826-829.
- 22. Gallup G, Castelli J. The People's Religion: American Faith in the 90s. New York, NY: Macmillan; 1989.
- Shafranske EP, Malony NH. Clinical psychologists, religious and spiritual orientations and their practice of psychotherapy. *Psychotherapy*. 1990;27: 72-78.
- Reiser DE, Rosen DH. Medicine as a Human Experience. Baltimore, MD: University Park Press; 1984:36.
- Post SG. Ethical aspects of religion and health care. Mind Body Med. 1997;2:44-48.
- McKee DD, Chappel JN. Spirituality and medical practice. J Fam Pract. 1992;35:201–208.
- Kuhn CC. A spiritual inventory of the medically ill patient. *Psychiatr Med*. 1988;6:87–100.
- Strayhorn JM, Weidman CS, Larson DB. A measure of religiousness and its relation to parent and child mental health variables. *J Community Psychol.* 1990;18:34-43.
- Ellison CW. Spiritual well being: conceptualization and measurement. *J Psychol Theology*. 1983;11:330–340.
- 30. King DE, Bushwick B. Beliefs and attitudes of hospital inpatients about faith and prayer. *J Fam Pract.* 1994;39:349-352.
- Gallup Report No. 236. Religion in America. Princeton, NJ: The Gallup Organization; 1986.
- Bergin AE, Jenson JP. Religiosity in psychotherapists: a national study. Psychotherapy. 1990;27:3-7.
- 33. Levin JS. Religion and health: is there an association, is it valid, and is it causal? Soc Sci Med. 1994;38:1475-1482.
- 34. Favazza A. Modern Christian healing of mental illness. *Am J Psychiatry*. 1982;139:728-735.